

JAN 04 2005

SCIENTIFIC-ATLANTA, INC.  
LEGAL DEPARTMENT

From the INTERNATIONAL SEARCHING AUTHORITY

PCT

NOTIFICATION OF TRANSMITTAL OF  
THE INTERNATIONAL SEARCH REPORT AND  
THE WRITTEN OPINION OF THE INTERNATIONAL  
SEARCHING AUTHORITY, OR THE DECLARATION

To:

SCIENTIFIC-ATLANTA, INC.  
Intellectual Property Department  
Attn. Couturier, Shelley L.  
5030 Sugarloaf Parkway  
Lawrenceville, GA 30044  
UNITED STATES OF AMERICA

(PCT Rule 44.1)

Date of mailing  
(day/month/year)

27/12/2004

Applicant's or agent's file reference

F-8772-PC

**FOR FURTHER ACTION**

See paragraphs 1 and 4 below

International application No.

PCT/US2004/030012

International filing date  
(day/month/year)

14/09/2004

Applicant

SCIENTIFIC-ATLANTA, INC.

1. ☒ The applicant is hereby notified that the international search report and the written opinion of the International Searching Authority have been established and are transmitted herewith.

**Filing of amendments and statement under Article 19:**

The applicant is entitled, if he so wishes, to amend the claims of the International Application (see Rule 46):

**When?** The time limit for filing such amendments is normally 2 months from the date of transmittal of the International Search Report; however, for more details, see the notes on the accompanying sheet.

**Where?** Directly to the International Bureau of WIPO, 34 chemin des Colombettes  
1211 Geneva 20, Switzerland, Facsimile No.: (41-22) 740.14.35

**For more detailed instructions,** see the notes on the accompanying sheet.

2. ☐ The applicant is hereby notified that no international search report will be established and that the declaration under Article 17(2)(a) to that effect and the written opinion of the International Searching Authority are transmitted herewith.

3. ☐ **With regard to the protest** against payment of (an) additional fee(s) under Rule 40.2, the applicant is notified that:

☐ the protest together with the decision thereon has been transmitted to the International Bureau together with the applicant's request to forward the texts of both the protest and the decision thereon to the designated Offices.

☐ no decision has been made yet on the protest; the applicant will be notified as soon as a decision is made.

**4. Reminders**

Shortly after the expiration of **18 months** from the priority date, the international application will be published by the International Bureau. If the applicant wishes to avoid or postpone publication, a notice of withdrawal of the international application, or of the priority claim, must reach the International Bureau as provided in Rules 90bis.1 and 90bis.3, respectively, before the completion of the technical preparations for international publication.

The applicant may submit comments on an informal basis on the written opinion of the International Searching Authority to the International Bureau. The International Bureau will send a copy of such comments to all designated Offices unless an international preliminary examination report has been or is to be established. These comments would also be made available to the public but not before the expiration of 30 months from the priority date.

Within **19 months** from the priority date, but only in respect of some designated Offices, a demand for international preliminary examination must be filed if the applicant wishes to postpone the entry into the national phase until **30 months** from the priority date (in some Offices even later); otherwise, the applicant must, **within 20 months** from the priority date, perform the prescribed acts for entry into the national phase before those designated Offices.

In respect of other designated Offices, the time limit of **30 months** (or later) will apply even if no demand is filed within 19 months.

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

Name and mailing address of the International Searching Authority



European Patent Office, P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
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Authorized officer

Jolanda Offerman-Hazeleger

# PATENT COOPERATION TREATY

## PCT

### INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference  F-8772-PC	<b>FOR FURTHER ACTION</b>  see Form PCT/ISA/220 as well as, where applicable, item 5 below.	
International application No.  PCT/US2004/030012	International filing date (day/month/year)  14/09/2004	(Earliest) Priority Date (day/month/year)  15/09/2003
Applicant  SCIENTIFIC-ATLANTA, INC.		

This International Search Report has been prepared by this International Searching Authority and is transmitted to the applicant according to Article 18. A copy is being transmitted to the International Bureau.

This International Search Report consists of a total of 4 sheets.

☒ It is also accompanied by a copy of each prior art document cited in this report.

**1. Basis of the report**

a. With regard to the **language**, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ The international search was carried out on the basis of a translation of the international application furnished to this Authority (Rule 23.1(b)).

b. ☐ With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, see Box No. I.

2. ☐ **Certain claims were found unsearchable** (See Box II).

3. ☐ **Unity of invention is lacking** (see Box III).

4. With regard to the **title**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established by this Authority to read as follows:

5. With regard to the **abstract**,

☒ the text is approved as submitted by the applicant.

☐ the text has been established, according to Rule 38.2(b), by this Authority as it appears in Box No. IV. The applicant may, within one month from the date of mailing of this international search report, submit comments to this Authority.

6. With regards to the **drawings**,

a. the figure of the **drawings** to be published with the abstract is Figure No. 6

☐ as suggested by the applicant.

☐ as selected by this Authority, because the applicant failed to suggest a figure.

☒ as selected by this Authority, because this figure better characterizes the invention.

b. ☐ none of the figures is to be published with the abstract.

## INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/030012

## A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 H04N7/24 H04N5/00 H04N7/26 G11B20/12

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 H04N G11B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 1 195 995 A (PACE MICRO TECH PLC) 10 April 2002 (2002-04-10)	1-3, 5, 6, 8-24, 26, 28, 30-38
Y	paragraph '0013! - paragraph '0021!	4, 7, 9, 25, 27, 29, 39, 40
Y	I.E.G. RICHARDSON, Y. ZHAO: "Video codec complexity management" PCS01, 'Online! 30 April 2001 (2001-04-30), XP002309519 Retrieved from the Internet: URL:citeseer.ist.psu.edu> 'retrieved on 2004-12-07! paragraph '0001! ----- -/--	4, 7, 9, 25, 27, 29, 40

☒ Further documents are listed in the continuation of box C.

☒ Patent family members are listed in annex.

## \* Special categories of cited documents:

- \*A\* document defining the general state of the art which is not considered to be of particular relevance
- \*E\* earlier document but published on or after the international filing date
- \*L\* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
- \*O\* document referring to an oral disclosure, use, exhibition or other means
- \*P\* document published prior to the international filing date but later than the priority date claimed

- \*T\* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
- \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
- \*Y\* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.
- \* & \* document member of the same patent family

Date of the actual completion of the international search

8 December 2004

Date of mailing of the international search report

27/12/2004

Name and mailing address of the ISA

European Patent Office, P.B. 5818 Patentlaan 2  
NL - 2280 HV Rijswijk  
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl,  
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Authorized officer

Valencia, E

# INTERNATIONAL SEARCH REPORT

International Application No  
PCT/US2004/030012

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT		
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	WO 01/13625 A (GEN INSTRUMENT CORP ; MORONEY PAUL (US)) 22 February 2001 (2001-02-22)	39
A	abstract	1-38,40
A	----- TOPIWALA P: "STATUS OF THE EMERGING ITU-T/H.264 / ISO/MPEG-4, PART 10 VIDEO CODING STANDARD" PROCEEDINGS OF THE SPIE, SPIE, BELLINGHAM, VA, US, vol. 4790, 8 July 2002 (2002-07-08), pages 261-277, XP008019409 ISSN: 0277-786X the whole document -----	9,25,29, 40

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/US2004/030012

Patent document cited in search report		Publication date		Patent family member(s)		Publication date
EP 1195995	A	10-04-2002	EP	1195995 A2		10-04-2002
			US	2002039483 A1		04-04-2002
WO 0113625	A	22-02-2001	AU	7881200 A		13-03-2001
			BR	0013411 A		30-04-2002
			CA	2381562 A1		22-02-2001
			CN	1372759 T		02-10-2002
			EP	1206874 A1		22-05-2002
			TW	540231 B		01-07-2003
			WO	0113625 A1		22-02-2001
			US	6532593 B1		11-03-2003
			US	6441754 B1		27-08-2002

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

## PCT

To:

see form PCT/ISA/220

### WRITTEN OPINION OF THE INTERNATIONAL SEARCHING AUTHORITY (PCT Rule 43bis.1)

Date of mailing  
(day/month/year) see form PCT/ISA/210 (second sheet)

Applicant's or agent's file reference  
see form PCT/ISA/220

**FOR FURTHER ACTION**  
See paragraph 2 below

International application No.  
PCT/US2004/030012

International filing date (day/month/year)  
14.09.2004

Priority date (day/month/year)  
15.09.2003

International Patent Classification (IPC) or both national classification and IPC  
H04N7/24, H04N5/00, H04N7/26, G11B20/12

Applicant  
SCIENTIFIC-ATLANTA, INC.

**1. This opinion contains indications relating to the following items:**

- ☒ Box No. I Basis of the opinion
- ☒ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

**2. FURTHER ACTION**

If a demand for international preliminary examination is made, this opinion will usually be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA"). However, this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of three months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

**3. For further details, see notes to Form PCT/ISA/220.**

Name and mailing address of the ISA:



European Patent Office - P.B. 5818 Patentlaan 2  
NL-2280 HV Rijswijk - Pays Bas  
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Authorized Officer

Valencia, E

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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/030012

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**Box No. I Basis of the opinion**

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1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.
  - ☐ This opinion has been established on the basis of a translation from the original language into the following language , which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ in written format
    - ☐ in computer readable form
  - c. time of filing/furnishing:
    - ☐ contained in the international application as filed.
    - ☐ filed together with the international application in computer readable form.
    - ☐ furnished subsequently to this Authority for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.  
PCT/US2004/030012

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**Box No. II Priority**

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1. ☒ The following document has not been furnished:

- ☒ copy of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(a)).
- ☐ translation of the earlier application whose priority has been claimed (Rule 43*bis*.1 and 66.7(b)).

Consequently it has not been possible to consider the validity of the priority claim. This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.

2. ☐ This opinion has been established as if no priority had been claimed due to the fact that the priority claim has been found invalid (Rules 43*bis*.1 and 64.1). Thus for the purposes of this opinion, the international filing date indicated above is considered to be the relevant date.
3. ☐ It has not been possible to consider the validity of the priority claim because a copy of the priority document was not available to the ISA at the time that the search was conducted (Rule 17.1). This opinion has nevertheless been established on the assumption that the relevant date is the claimed priority date.
4. Additional observations, if necessary:

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**Box No. V Reasoned statement under Rule 43*bis*.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	39,40
	No: Claims	1-38
Inventive step (IS)	Yes: Claims	
	No: Claims	39,40
Industrial applicability (IA)	Yes: Claims	1-40
	No: Claims	

2. Citations and explanations

**see separate sheet**



**Re Item V.**

- 1 The following documents are referred to in this communication:
- D1 : EP 1 195 995 A (PACE MICRO TECH PLC) 10 April 2002 (2002-04-10)
- D2 : WO 01/13625 A (GEN INSTRUMENT CORP ; MORONEY PAUL (US)) 22 February 2001 (2001-02-22)
- D3 : I.E.G. RICHARDSON, Y. ZHAO: "Video codec complexity management" PCS01, [Online] 30 April 2001 (2001-04-30), XP002309519 Retrieved from the Internet: URL:citeseer.ist.psu.edu>; [retrieved on 2004-12-07]

2 INDEPENDENT CLAIMS 1, 5, 10, 14, 19

- 2.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of claim 1 is not new in the sense of Article 33(2) PCT.

Document D1 discloses (the references in parenthesis applying to this document):

A method comprising the steps of:

- encoding a video stream in a first compressed format (par 13);
- storing the first compressed video stream in a storage device (par 13),
- retrieve the first compressed video stream (by direct and unambiguous implication from paragraph 16),
- decode the first compressed video stream (by direct and unambiguous implication from paragraph 16),
- encode the decoded video stream in a second compressed format (par 16-19),
- store the video stream encoded in the second compressed format in the storage device (par 16-19).

3 INDEPENDENT CLAIM 23, 26, 30, 33, 37

- 3.1 The objection 2.1. above applies, mutatis mutandis, to set top terminal claims 23, 26, 30, 33 and 37 which are also not new in the sense of Article 33(2) PCT.

**4 INDEPENDENT CLAIM 39**

4.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject matter of claim 39 does not involve an inventive step in the sense of Article 33(3)PCT.

4.1.1 Document D1, which is considered to represent the most relevant state of the art to the subject matter of claim 39, discloses (the references in parenthesis applying to this document):

A method comprising the steps of:

- storing a video presentation (par 1 and 13);
- transcoding a the video presentation a first compressed format (par 16-19);
- decoding and providing the stored video presentation to a user (par 2),

4.1.2 The subject-matter of independent claim 39 differs from the disclosure of D1 in that : only a second portion of the video presentation is transcoding in a second format.

4.1.3 The problem to be solved by the present invention may therefore be regarded as providing a recompression process to save space on th HDD of the system of D1 that does not necessarily require that w hole program is entirely transcoded.

4.1.4 In view of D2 the solution proposed in claim 39 of the present application cannot be considered as involving an inventive step (Article 33(3) PCT) since D2, also in the field of transcoding process in a set top box discloses to transcode a part of a program as a normal possibility.

4.1.5 Therefore the features disclosed in D1 and D2 would be combined by the skilled person, without exercise of any inventive skills in order to solve the problem posed. The proposed solution in independent claim 39 thus cannot be considered inventive (Article 33(3) PCT).

**5 INDEPENDENT CLAIM 40**

5.1 The present application does not meet the criteria of Article 33(1) PCT, because the subject matter of claim 40 does not involve an inventive step in the sense of Article 33(3)PCT.

5.1.1 Document D1, which is considered to represent the most relevant state of the art to the subject matter of claim 40, discloses (the references in parenthesis applying to this document):

A method comprising the steps of:

- encoding a video stream in a first compressed format (par 13);
- storing the first compressed video stream in a storage device (par 13),
- retrieve the first compressed video stream (by direct and unambiguous implication from paragraph 16),
- decode the first compressed video stream (by direct and unambiguous implication from paragraph 16),
- encode the decoded video stream in a second compressed format (par 16-19),
- store the video stream encoded in the second compressed format in the storage device (par 16-19).

5.1.2 The subject-matter of independent claim 40 differs from the disclosure of D1 in that the second compressed format is H264, which is one of the obvious possibilities of a more efficient compression format in terms of compression rate in order to save space on the HDD as disclosed in D1. The skilled person would select this second format without the exercise of any inventive skill, see for example D3.

5.1.3 Therefore the features disclosed in D1 and D3 would be combined by the skilled person, without exercise of any inventive skills in order to solve the problem posed. The proposed solution in independent claim 40 thus cannot be considered inventive (Article 33(3) PCT).

6. Dependent claims 2-4, 6-9, 11-13, 15-18, 20-22, 24, 25, 27-29, 31, 32, 34-36, 38

**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING  
AUTHORITY (SEPARATE SHEET)**

International application No.

PCT/US2004/030012

do not contain any features which, in combination with the features of any claim to which they refer, meet the requirements of the PCT in respect of novelty and/or inventive step (Article 33(2) and (3) PCT).